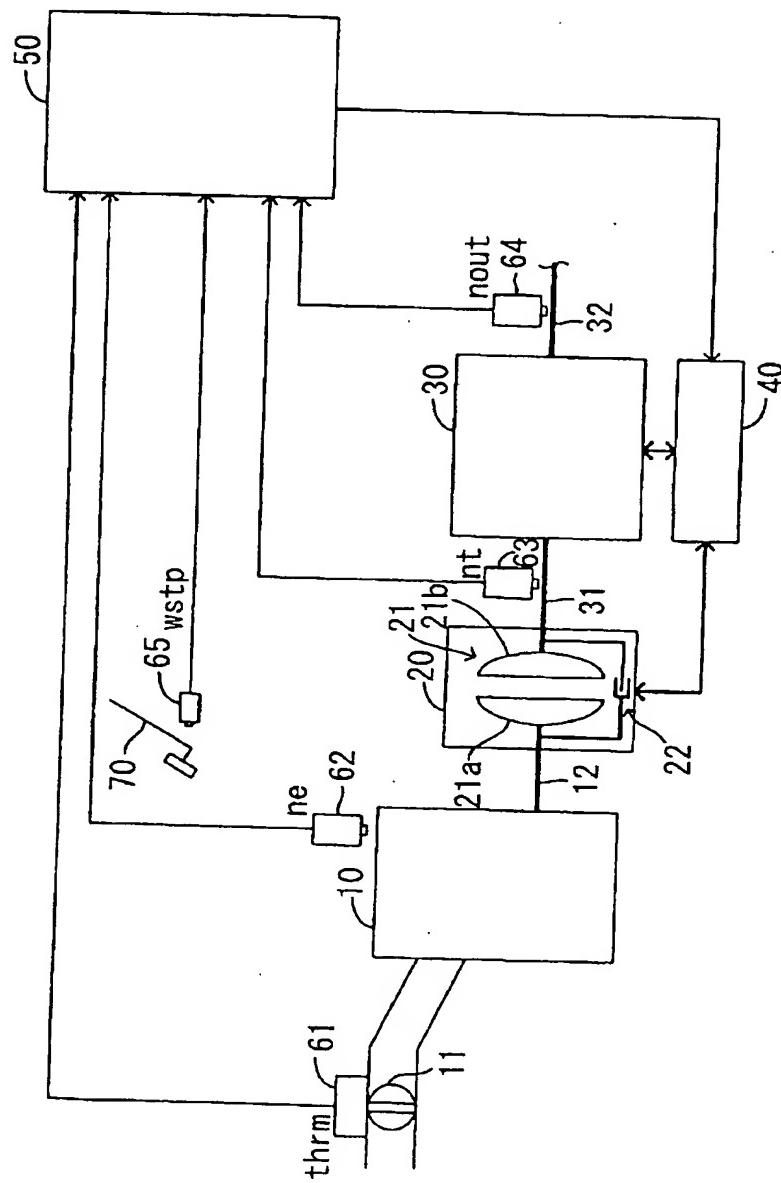
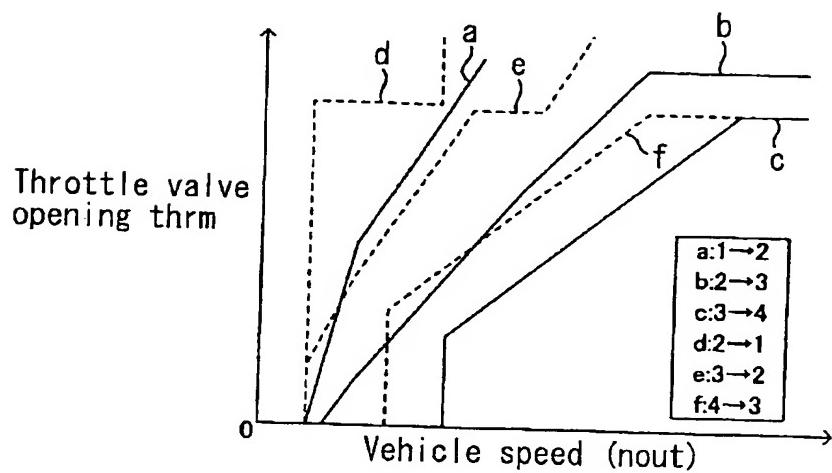


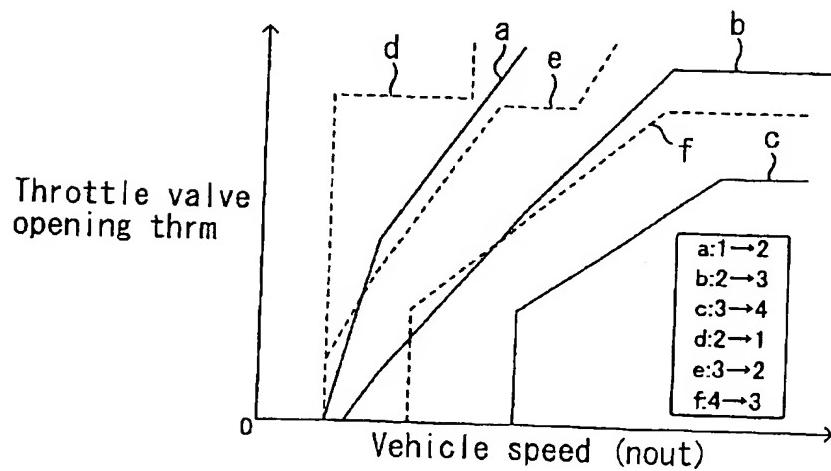
FIG. 1



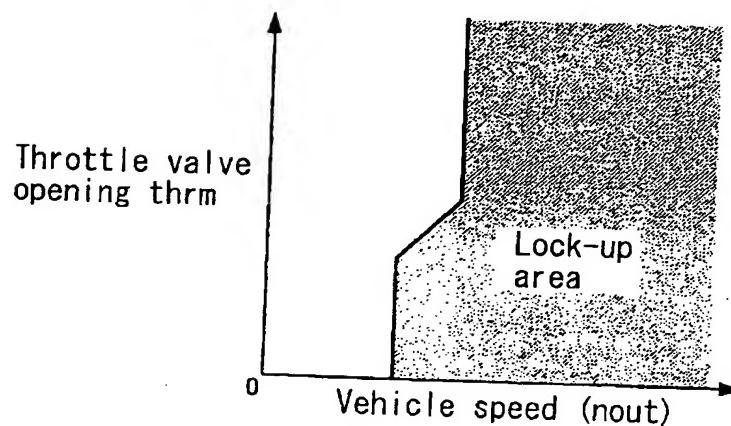
F I G. 2 ( A )



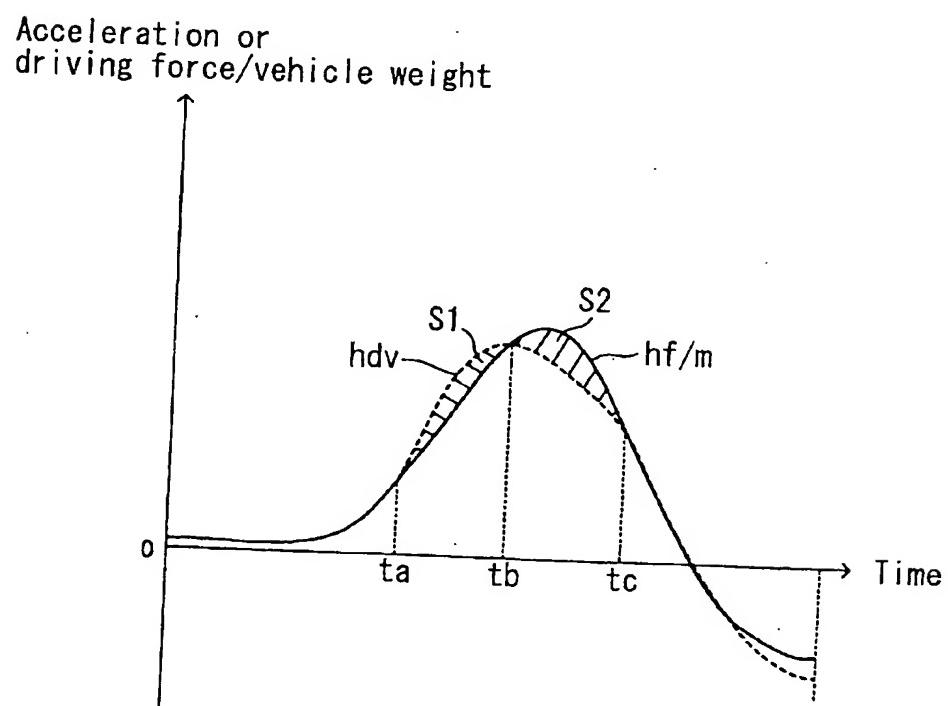
F I G. 2 ( B )



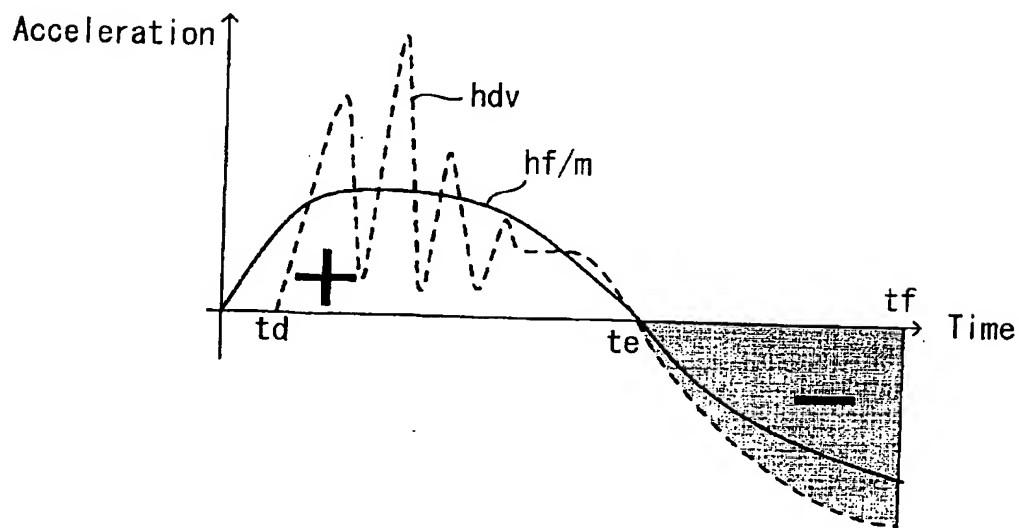
F I G. 3



F I G. 4



F I G. 5 ( A )



F I G. 5 ( B )

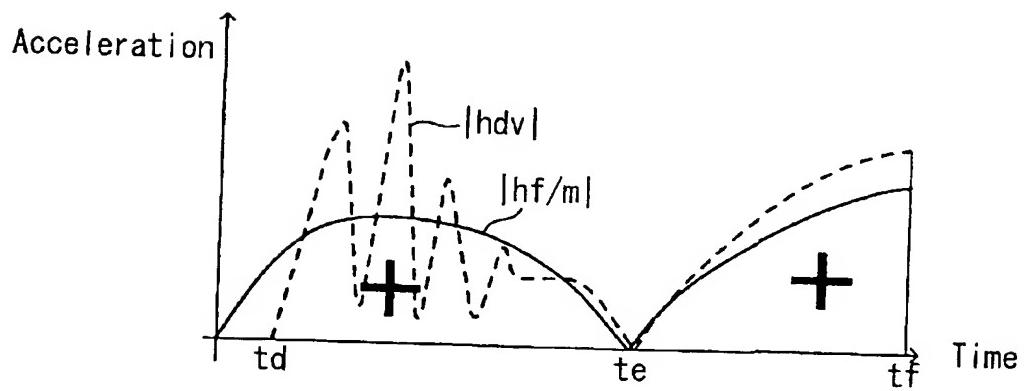


FIG. 6

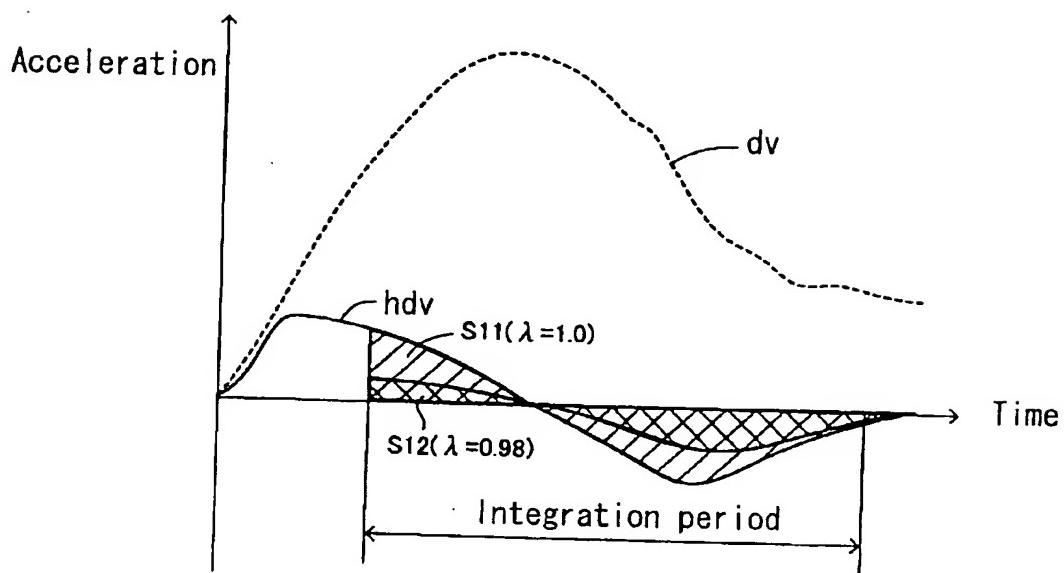


FIG. 7

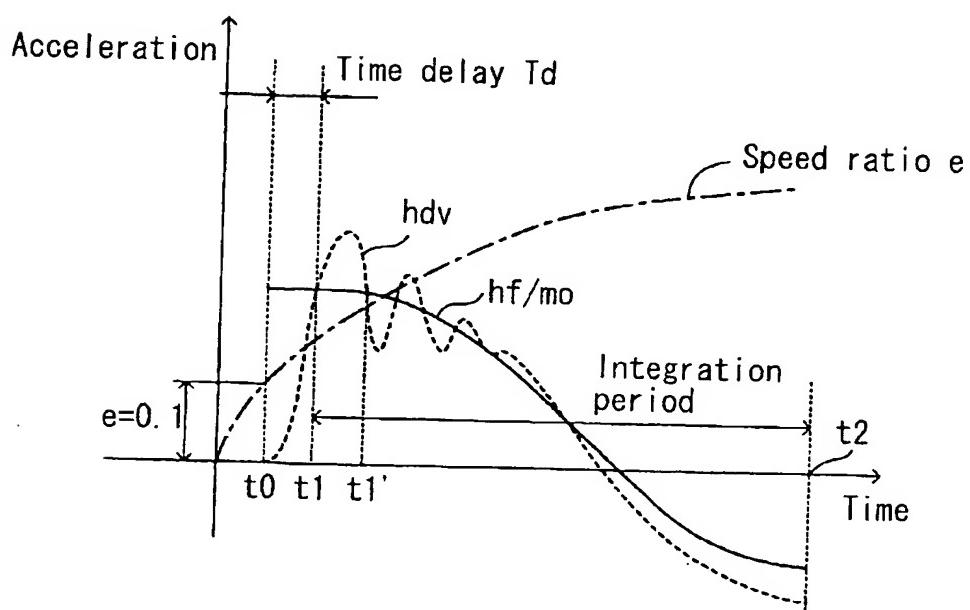


FIG. 8 (A)

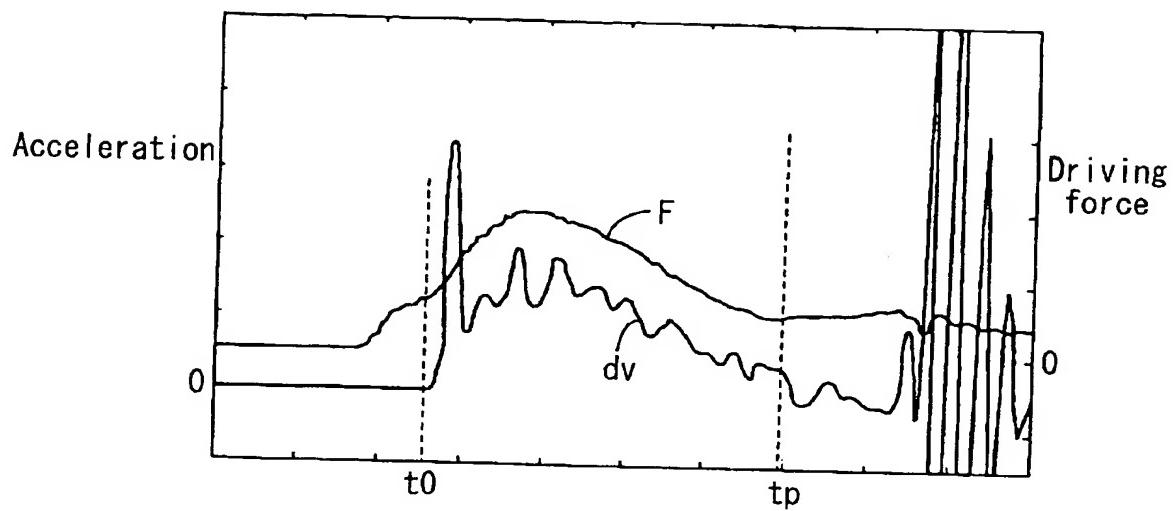


FIG. 8 (B)

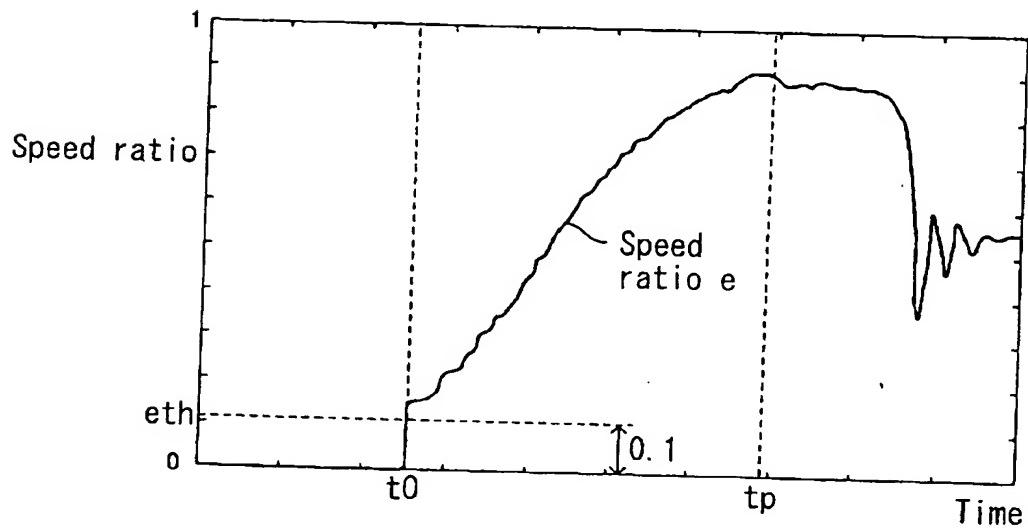


FIG. 9

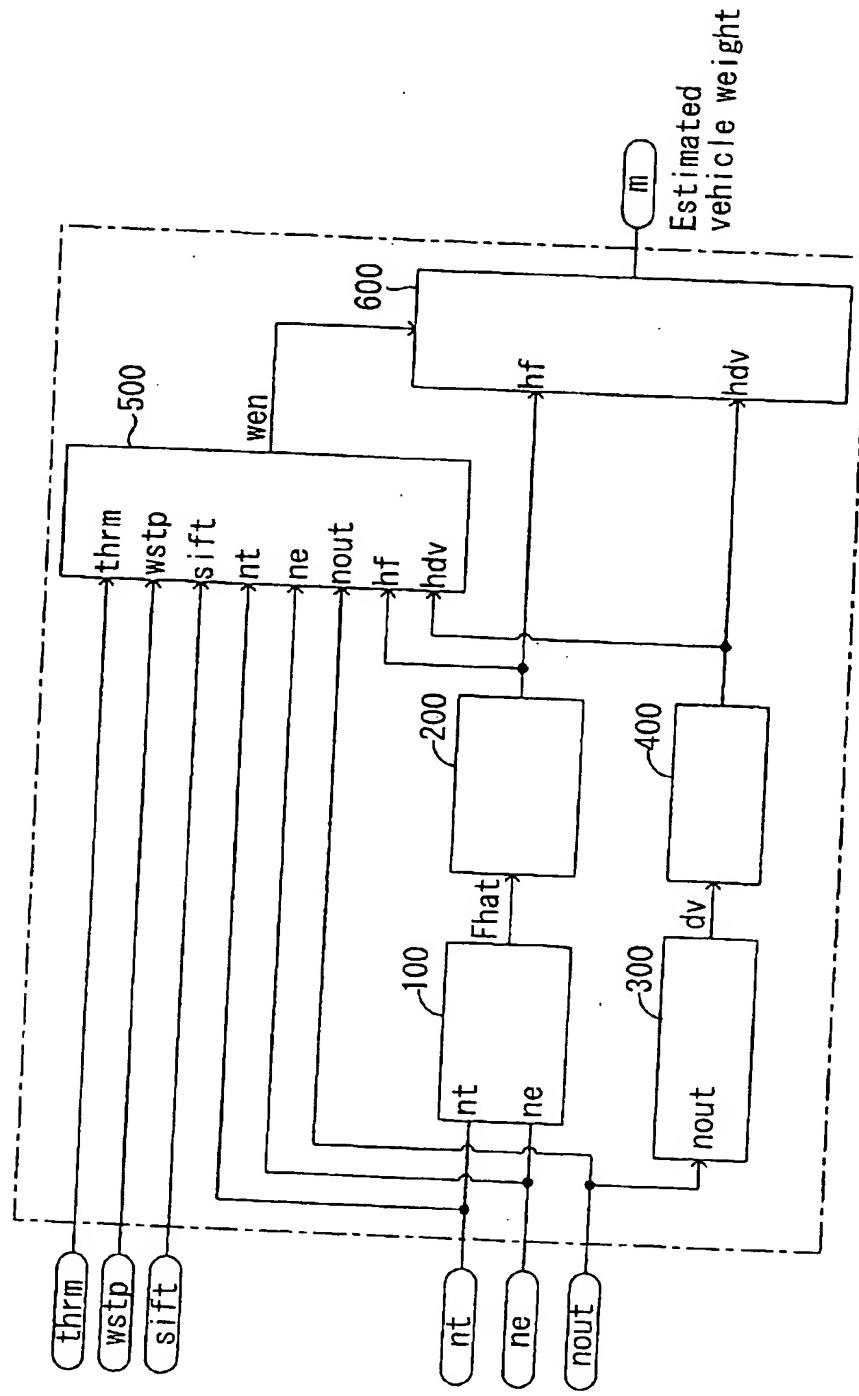


FIG. 10

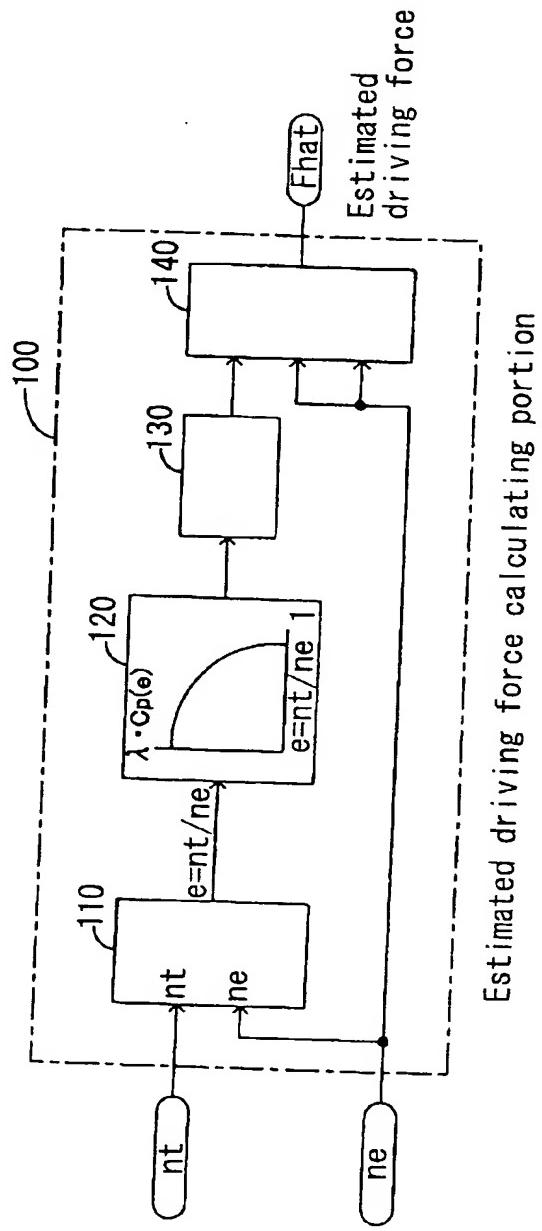
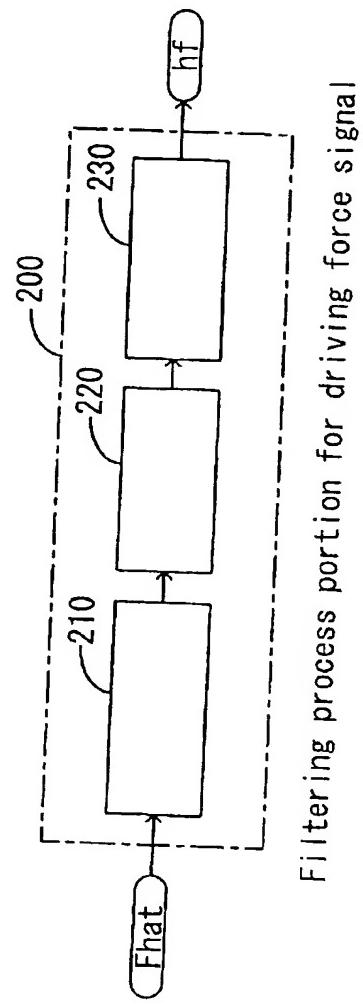
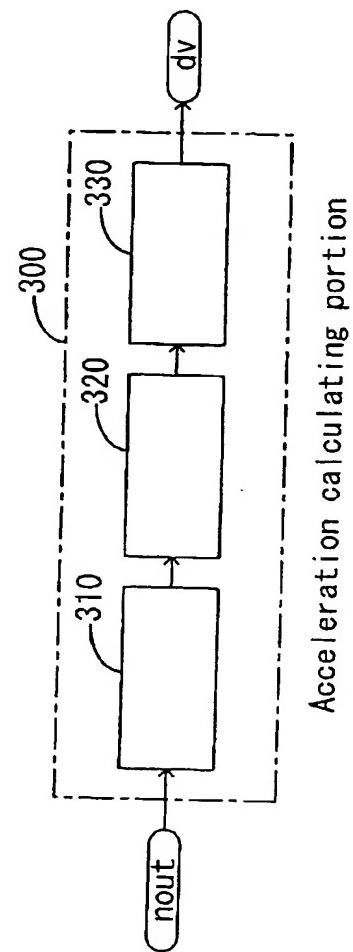


FIG. 11



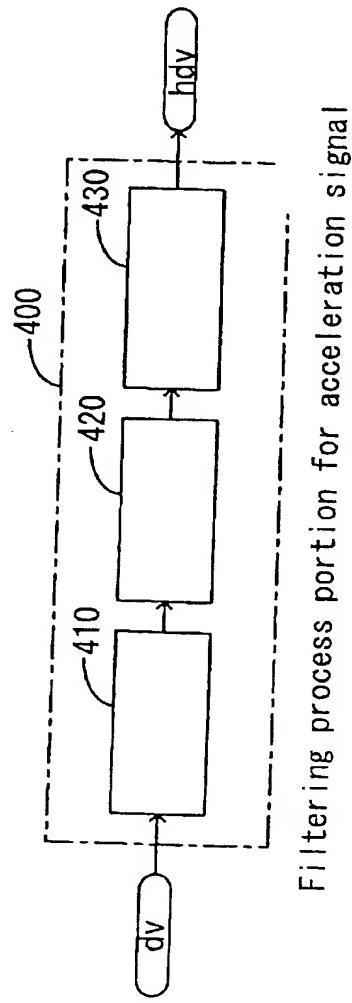
Filtering process portion for driving force signal

FIG. 12



Acceleration calculating portion

FIG. 13



Filtering process portion for acceleration signal

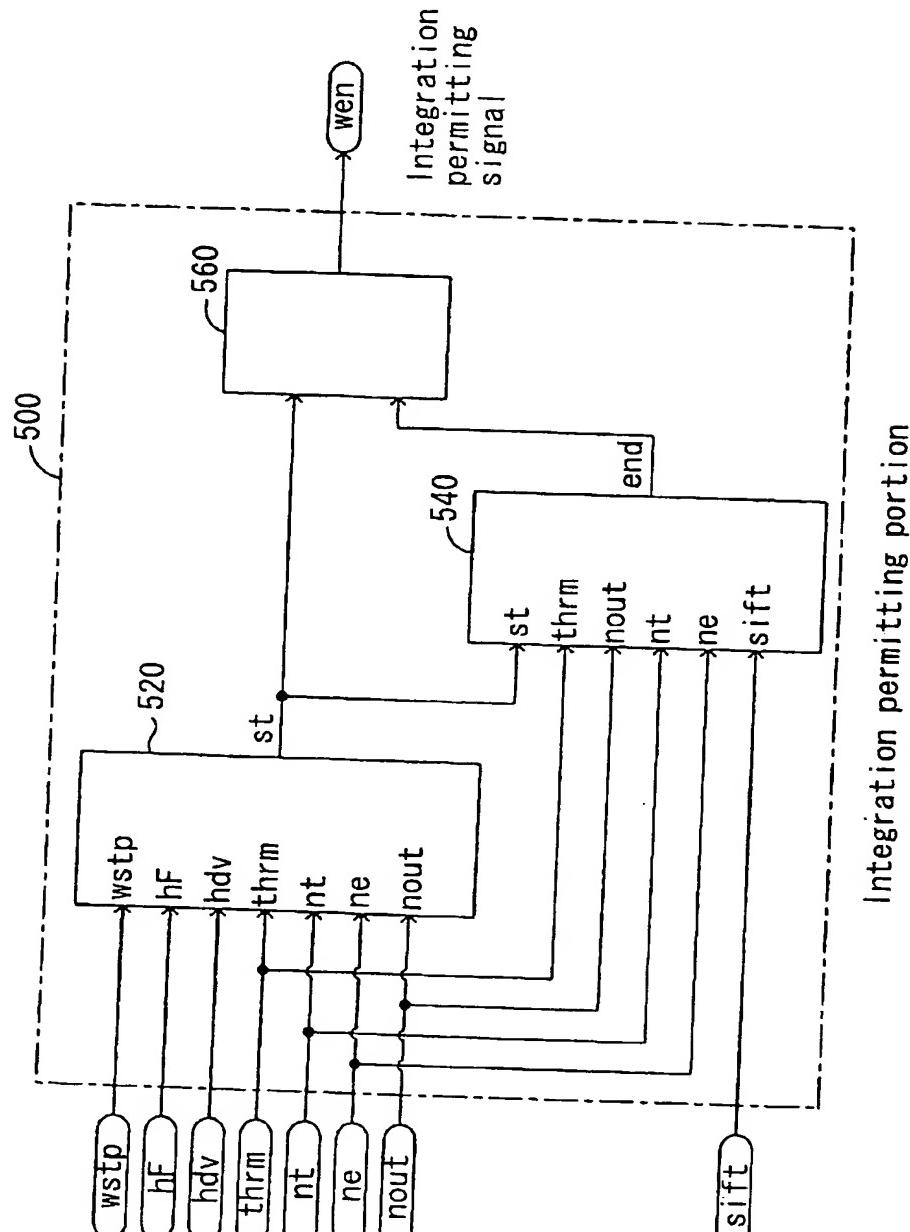


FIG. 14

FIG. 15

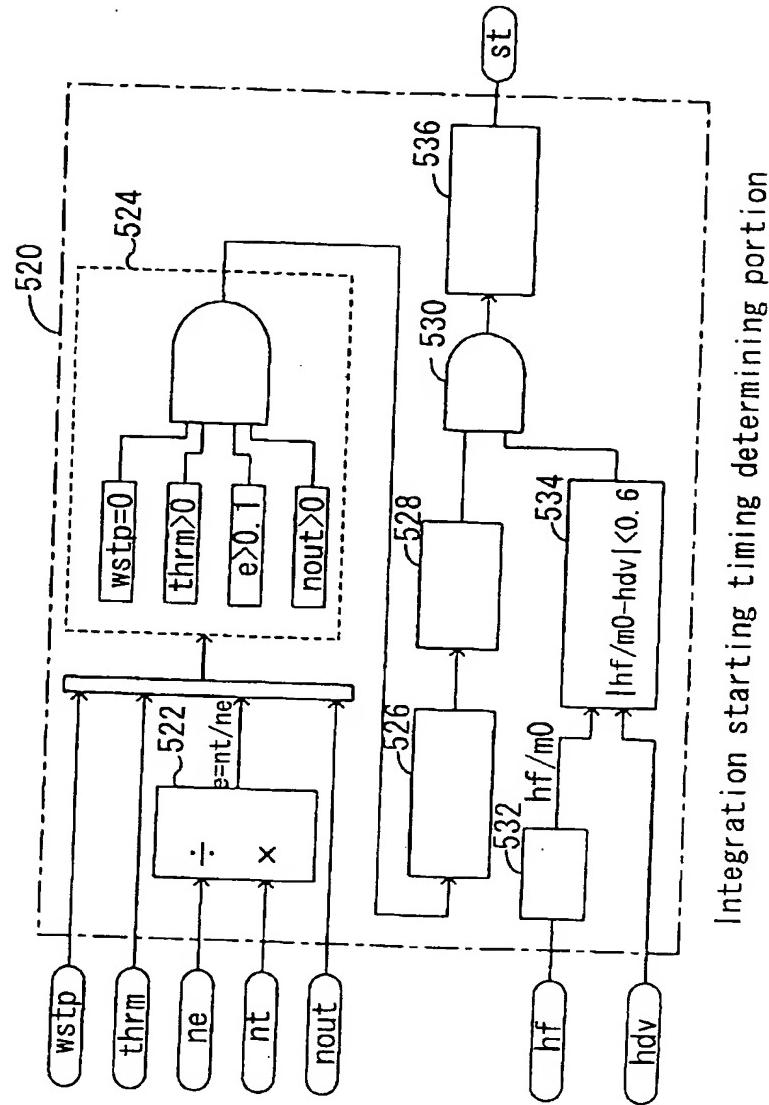


FIG. 16

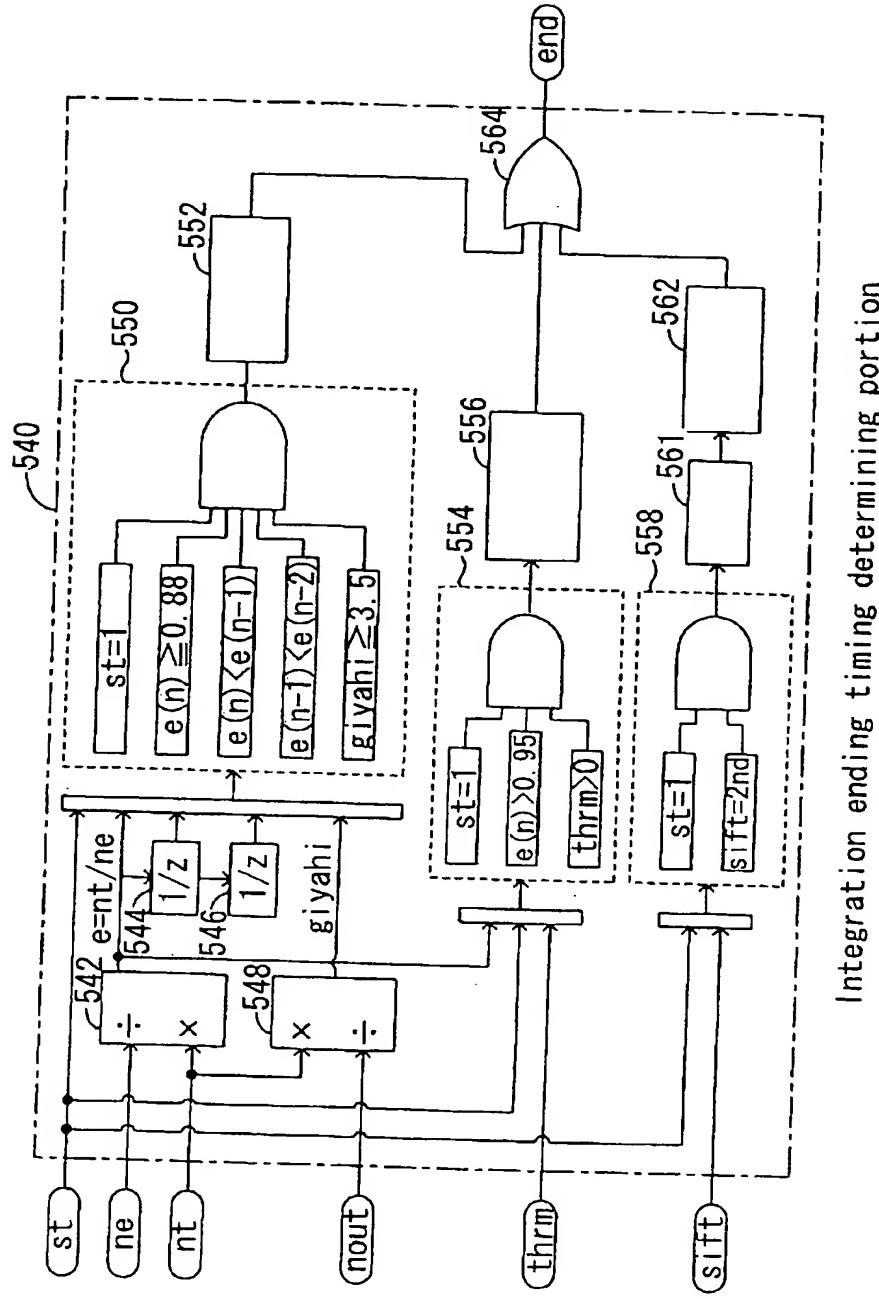
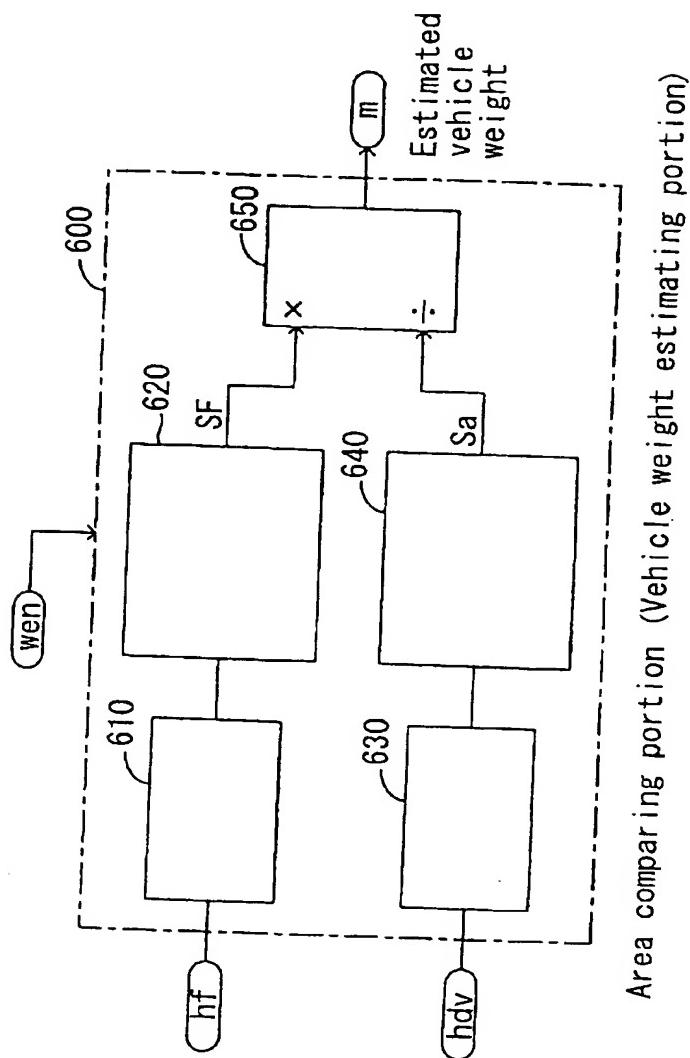
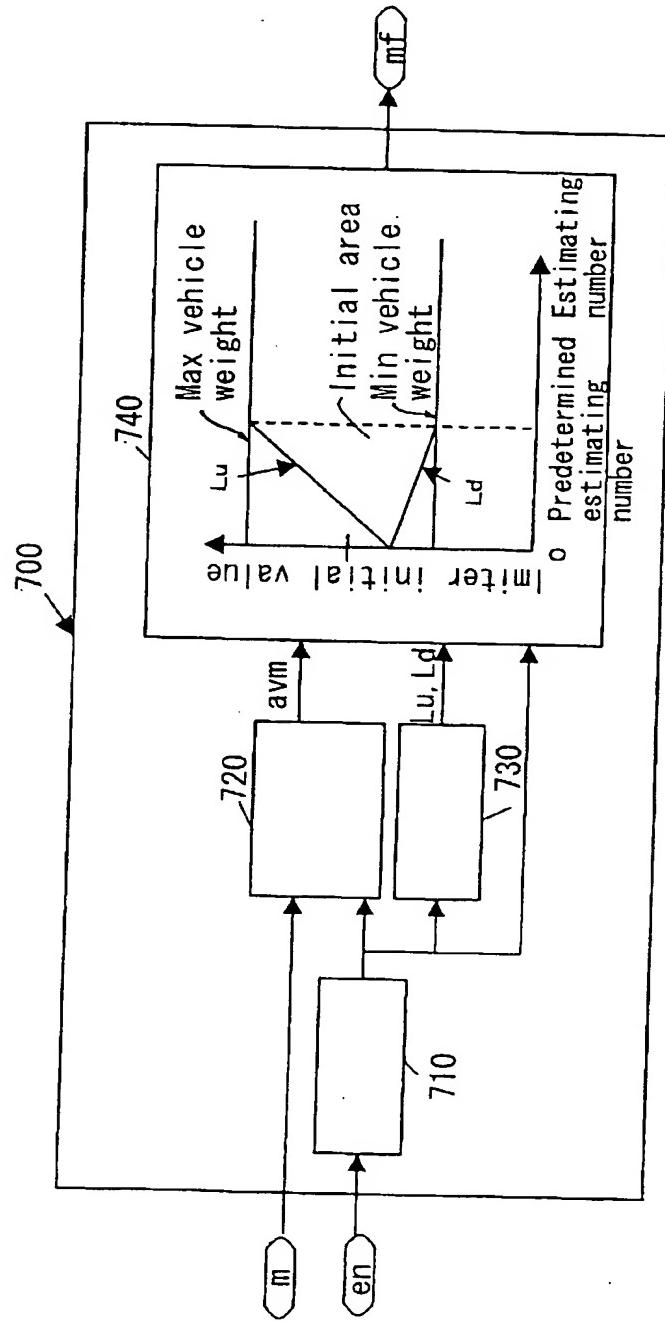


FIG. 17



Area comparing portion (Vehicle weight estimating portion)

FIG. 18



F I G. 19

